What is claimed is:

1. A printing apparatus for printing a pattern on a surface of a spark plug insulator, comprising:

a marking roller for forming an ink film on an intaglio thereon;

a transfer roller for transferring said ink film which is further transferred to said spark plug insulator in order to print said pattern;

an ink supply nozzle for supplying an ink for said ink film; and

a doctor blade for scratching from said marking roller said ink which does not contribute to form said ink film,

wherein a concave depth in said intaglio is greater than or equal to 15 μm and smaller than or equal to 20 μm.

2. The printing apparatus according to claim 1, wherein:

said marking roller is made of metal; and

said transfer roller is made of resin, rubber, or, resin & rubber.

3. The printing apparatus according to claim 1, wherein said marking roller and transfer roller contact with each other at substantially constant rotation speed and printing pressure.

4. The printing apparatus according to claim 1, wherein said doctor blade: is disposed at an upper side of said marking roller; is movable along the tangential and normal directions of the surface of said marking roller; and is pressed against said marking roller along a direction

normal to the longitudinal direction of said doctor blade.

5. The printing apparatus according to claim 1, wherein said doctor blade is disposed at a lower side of said marking roller and is movable along the tangential and normal directions of the surface of said marking roller.

6. The printing apparatus according to claim 1, wherein said doctor blade is softer than said marking roller.

7. The printing apparatus according to claim 1, wherein said printing pressure expressed by a compression of said transfer roller is greater than or equal to 0.3 mm and smaller than or equal to 0.8 mm.

8. The printing apparatus according to claim 1, wherein a temperature of said ink is higher than or equal to 20℃ and lower than or equal to 35℃.

9. The printing apparatus according to claim 1, wherein the surface of said transfer roller is stepped in accordance with the surface of said spark plug insulator.

10. The printing apparatus according to claim 1, wherein the surface of said marking roller is hardened.

11. The printing apparatus according to claim 1, wherein the surface of said marking roller is coated by TiN.

12. A printing method for printing a pattern on a surface of a spark plug insulator, comprising the steps of:

splaying an ink on a surface of a marking roller with an intaglio;

scratching a surplus of said ink on said intaglio by using a doctor blade which is movable along the tangential

and normal directions of said marking roller and is pressed against said marking roller along a direction normal to the longitudinal direction of said blade; and

transferring the ink film on said intaglio through a transfer roller to the surface of said spark plug insulator.

13. The printing method according to claim 12, wherein said transferring step is a step of transferring the ink film on said intaglio to a transfer roller which is stepped in accordance with a stepped surface of said spark plug insulator.